extinguish it. In 7 cases in this division people who fired the forests were caught: 3 of the 7 cases were compounded, and the other 4 prosecuted, with the result that 1 was acquitted, 1 was fined Rs. 2, 1 received simple imprisonment for 8 days, and another rigorous imprisonment for one month. The area traversed by fire in the Násik Division has been double as much as that burnt last year; 3 ranges—Niphád, Chándvad and Málegaon—were entirely free from fires; the Niphád forests have been closed for some years, and have never been visited by fires. In the Ahmednagar Division 17 fires covered about twice as much ground as they did last year, but the proportion burnt is very small; one range only—Kopargaon—saw no forest fire. In the Sátára Division 2,577 acres only were burnt, and nearly 2,374 of this occurred in one range—Pátan. In the Sholápur Division the forest fires have been on the increase, but only 24 reserves were visited by them, and in the Bársi, Málsiras, and Pandharpur ranges no fires occurred. In the Surat Division a considerable portion of the forests in the Mándvi Range and in the Dángs was traversed by fire. In the Panch Maháls a marked improvement in fire-conservancy is noticeable in all the ranges save Hálol, where the forests round and up the slopes of Pavagad hill were burnt.

85. The following statement shows the forest areas in the different divisions, the portion which has been traversed by fire during the year, and the percentage the latter bears to the former:—

No.	Divisions.					Forest Acreage.	Acreage burned.	Percentage burned.
	•							
1	North Thána		***			3,73,993	25,803	6.9
2	South Thána		***			3,95,803	16,952	4.3
3	East Khandes	h			[4,93,101	21,028	4.2
4	West Khánde	sh	***			7,66,237	42,496	5.2
5	Násik		***		[7,10,949	12,210	1.7
6	Ahmednagar		***		• • • •	5,44,048	3,315	0.6
7	Poona		***			4,62,101	1,691	0.3
8	Sátára	107	***			4,22,160	2,577	0.6
9	Sholápur		***			1,49,065	2,135	1.4
10	Surat		100			6,20,284	33,347	5.3
11	Panch Maháls		••••		•••	2,06,957	14,809	7.1
				Total		51,44,698	1,76,363	3.4

In the Deccan forests it is practically perfect, and no smaller percentage will be found anywhere. In the Konkan, improvement is visible, and also in the Panch Maháls. The Khándesh forests and the Dángs and Mándvi are about the worst examples, but there are special reasons which make fire-conservancy difficult in these tracts. No special establishments are employed upon fire-conservancy, as no special establishments could in the circumstances of the forests be employed with any advantage. A sustained improvement in all branches of forest conservancy and works ought to be the aim of the Forest Department in India; and this can, as far as the forests of the Northern Circle are concerned, be best secured, both as regards economy and results beneficial to forests, by permanent establishments being taught how to perform the different duties of protection &c., and by inducing villagers to co-operate with forest subordinates in preserving forests against visitations by fire and in extinguishing fires when they do occur: in this view, rewards are given to villagers for the labour provided and the ready assistance tendered by them in burning fire traces and in fighting against and putting out fires. The expenditure in the year on these accounts has amounted to Rs. 470-7-9.

(D)—GRAZING AND FODDER GRASS.

87. The grass and grazing revenues of the forests of the Northern Circle during the period since the famine and since the forests have been established under the Forest Act have shown a steady increase, and this result has been a

marked feature in the history of the forest administration. The following gives a return of the revenue from this source for the past nine years:—

1878 - 79		***	* 1 4	13.5	11.8	Rs.	42,629	
1879-80	***	4 7 7	431		***	2.9	64,613	
1880-81		511	4	e of R	***	93	1,00,443	
1881-82	147	***	***	• • •		22	1,41,765	
1882-83	,		4	4.1		,,	1,64,444	
1883-84		***	441				1,97,963	
1884-85	***	***	454			22	2,25,853	
1885-86		4 0.5	***	44.		13	2,32,650	
1886-87	144	***	141	. 24	4,64	,,	2,37,126	

88. The revenue from this source compares, as under, with the figures of the previous year:—

No.	Divisions.			1885-86.			1886-87.			Remarks
				Rs.	a.	p.	Rs.	a.	p.	
1	North Thána	111	4.4	8,041	5	9	9,978	8	0	
2	South Thána	***	•••	2,755	2	3	2,316	5	8	
3	East Khándesh		111	22,780	7	0	26,953	7	6]
4	West Khándesh			36,396	5	6	33,411	0	0	
5	Násik			21,004		5	37,831	5	0	
6	Ahmednagar		***	19,012		6	27,199	12	11	
7	Poona	e 4	***	61,082	5	0	47,707	11	9	
8	Sátára	***	***	36,841	4	6	37,156	8	0	
	Sholapur		,		14	0	5,732	2	9	
10	Surat	0.9.0	***	1,759		6	1,274		0	
11	Panch Mahals	444	• • • •	8,107	10	0	7,564	• 1	0]
		\mathbf{T}	otal	2,32,649	13	5	2,87,125	13	7	l

The rules contained in Government Resolution No. 7467, dated 15th September 1885, Revenue Department, given in paragraph 90 of the administration report of last year, were worked up to as far as possible. In the Thana divisions there is very little restriction as to grazing or the cutting of grass by forest villagers; professional graziers from above Gháts and from Bombay who come into the Thána forests to graze their cattle are charged fees, and the grass of some specially valuable grass-producing forest tracts, where it has hitherto-been customary to do so, is sold by auction. In the North Thána Division the revenue from this source has continued to increase, and for the year under report it appears at Rs. 9,978 against Rs. 8,041 of the previous year. There is a wealth of grass in the Thana forests: during the great Deccan famine the Conservator of Forests personally directed the pressing in bales of hay obtained from the Thána forests, which was then sent up by railway to the Sholapur Districts to feed cattle employed in the circulation of grain conveyed from railway stations to distant famine-stricken villages, and in this way human life was saved. But the grass crop in the forests is much wasted, the villagers take what they want for the rab of their fields, and the residue gets burnt, until at the end of the hot weather the price of grass goes up to Rs. 10 and 13 per 1,000 bundles. In Khandesh free grazing is allowed in the North Tapti Privilege Code, and Dhulia and Sindkheda are the only ranges in which fees are paid in the West Khandesh Division, but the revenue has increased here, as well as in the other divisions where free grazing does not prevail. In the Nasik Division the sale of grass declined from Rs. 9,505 to Rs. 9,032; but, on the other hand, fees produced an increased revenue, free grazing was given to all village cattle, and only outside cattle belonging to professional graziers paid fees. The auction-sales of grass in the Ahmednagar Forest Division produced a higher revenue this year, and the fees also exceeded the collections, under this head, of the year before, thus evidencing that the villagers who were very hostile to the fee system at its introduction are coming round. Grazing was permitted from 1st June to 31st March in this division. In the Poona Division the receipts have fallen considerably, a very large proportion of the forest area was open to free grazing, and the Divisional Forest Officer reports that Dhangars and others take advantage of the free-grazing areas to evade payment of fees on their cattle. The value of the

grass supplied to the Commissariat Department in this Division, for which no credit by book adjustment is received, amounts to Rs. 13,555, and the value of free grazing conceded to village cattle is assessed at Rs. 41,500. Grazing working plans, in accordance with the orders of Government contained in the several resolutions upon demarcations and settlements of the forests of different talukás in the Sátára Collectorate, were compiled by the Divisional Forest Officer and sanctioned by the Collector. The total revenue for the year was greater than for the preceding year. The receipts were collected by the village officers, to whom a percentage in remuneration of their work has to be paid. New rules were passed in Government Resolution No. 1511 of the 11th March 1887 for the collection of forest revenue by village officers and for the payment of remuneration to them, which provide as under:—

I.—When the agency of village officers is in future employed in the collection of forest revenue they shall be remunerated by a deduction from the gross revenue collected at the time it is made over by them to forest officers, and at no other time.

Sums paid for grass reserves, &c., and not passing necessarily through the village books should not carry remuneration to village officers.

II.—The rate of remuneration payable shall be 6 pies in the rupee to the patil and 9 pies in the rupee to the kulkarni.—In calculating the amount of remuneration due to any village officer, fractions of a rupee above eight annas shall be regarded as one rupee; all others shall be neglected.

III—Village officers shall issue passes or grant receipts for revenue received from passbooks (in counterfoil, each leaf of which shall be numbered consecutively,) supplied to them by the Forest Department after entering the particulars in the counterfoils. When the passes are issued, the village officers shall take the signature of the persons to whom passes are issued on the counterfoils.

IV.—The collections made by the village officer shall be accounted for to the forest officer when on his rounds, or when the village officer calls on the forest officer for the necessary chalans. The village officer may accumulate his collections for a month, but not for a longer time. The forest officer shall receive the money due from the village officer, or give to the village officer a chalan for the full amount entered in the counterfoils, less the remuneration due to the village officer.

V.—The forest officer, on receiving the amount or giving the chalan, shall obtain a receipt from the village officer for the remuneration deducted, in the following form:—

Receipt for remuneration due for the collection of Forest Revenue by the Officers of village ,Táluka ,District ,from

188 to 188

Name of Village.	Date of	Gross Amount	Remu	NERATION DUE.	Net Amount to be paid into Treasury.	Remarks.
*10112 21 . 1102	Collection.	collected,	Rate.	Amount.		
	,					
				1 1		

Received Rs.

Date

Patil.

Received Rs.

Kulkarni.

Date

VI.—If in any village any difficulty be felt in obtaining the countersignature of the officers of the Forest Department, the Conservator may, after satisfying himself of the difficulty, authorise the Treasury or Sub-Treasury Officer concerned to receive forest revenue collected by village officers without the countersignature on the chalan by officers of the Forest Department. The officer receiving the money should see that the calculation of the remuneration is correct, and should send the chalan and the receipt for remuneration to the Range Forest Officer, in whose accounts the receipts of such village are accounted for.

- VII.—In the accounts kept by the Forest Department the gross amount of revenue collected shall be credited, and the remuneration paid be debited, to the appropriate heads of account.
- VIII.—At the end of each month the Divisional Forest Officer shall, as prescribed in Section 143 of the Forest Code, draw a cheque for the amount of remuneration paid by himself and his subordinates during the month, to be credited at the Treasury by transfer to Forest Remittances.
- IX.— When revenue collected by village officers is refunded, the remuneration paid to the village officers for its collection need not be recovered, unless the village officers are to blame in collecting it.
- X.—The counterfoils of all exhausted pass-books shall be made over by the village officers to the Forest Department for record in that department.
- XI.—Forest officers shall, occasionally, on their rounds, collect, if possible, passes granted by village officers, and compare them with the corresponding counterfoils.
- The grazing fees in the Sholapur Division have not produced so large a revenue as was anticipated. Cattle were admitted throughout the forests of the Surat Division on the fee system. In the Panch Mahals Division Rs. 2,876-7-0 were realised by sale of grass for cutting and removal, and Rs. 4,687-10-0 were obtained by the issue of grazing permits to professional graziers and cattle-breeders throughout the district. No fees of any kind were taken from ordinary rayats on account of grazing throughout the year. Free grazing in forests causes loss of revenue, both directly and indirectly, for the value of the pasturage enjoyed by the privileged cattle is lost, and then a number of non-privileged cattle evade payment of fees under cover of free cattle. Under Rule 7 of the grazing rules forest guards are prohibited from interfering with the herds, except with cattle trespassing into closed areas, and consequently the check and supervision over cattle-grazing in the portions of the forests opened to grazing must be practically nil, for village officers have their own professional occupations to claim their time and attention, the patil as well as the kulkarni has his fields and his other business to look after, and cannot afford the time and attention, even if he possessed the inclination, to go into the open forest compartments daily and hourly to ascertain whether irregularity with reference to cattle-feeding was going on. The village officer may possibly be able to know at sight all the privileged cattle of the village and to recognize cattle that ought to pay fees, but this is extremely doubtful: any how the forest guard is not so well acquainted with the agricultural cattle of the villagers as to be able to distinguish them and to detect trespassers in the midst of numbers of free cattle; and, unless he is allowed to interfere with the herds, to require the production of free permits, and fee permits, illicit grazing must prevail. It is certainly the duty of the Forest Department, seeing what are the circumstances surrounding our forest reservations, to provide the largest extent of pasturage that can with proper regard to the interests of forestry be provided, and an enormous area can with comparative safety be opened to grazing in all the divisions so long as a limitation of the number of cattle to be entered upon particular areas is enforced, and a grazing season is observed. It has been proved conclusively that the improvement of the grass crop upon the hills of the Deccan, in quality as well as yield, is the natural consequence of the repoisement of the hills, and that a good and abundant growth of grass can in no other way be secured than by bringing in the first place soil and moisture upon the slopes.

(E)—FENCING.

91. In the Mahim Range of the North Thana Division the wire fencing round the Wankas, Kamare, and Khaire reserves was put into efficient condition at a cost of Rs. 879. In the Salsette Range the forests of Persick and Khandevli had euphorbia planted upon their lower boundaries: 2,267 and 1,040 running feet of hedge were thus erected, costing Rs. 22-3-0 and 19-4-0 respectively. In the Ahmednagar Division 25,163 running feet of hedging of sabri with bambus planted in places on the line were put down upon the boundaries of reserves in 9 ranges at a cost of Rs. 144-7-3; and in the Satara Division in 7 ranges 50,015 feet of fencing has been planted at a cost of Rs. 154-11-9. The Gundeva Reserved Forest in the Surat Division has had euphorbia cuttings put down upon its boundaries.